TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A 333 Guadalupe Street P.O. Box 149104 Austin, Texas 78714-9104
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PRODUCT EVALUATION Effective Date: November 1, 2012
WIN-1666 Reevaluation Date: **May 2013**

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Series 4000 Aluminum Twin Single Hung Windows, Impact Resistant, manufactured by

WinDoor Incorporated
7500 Amsterdam Drive
Orlando, Florida 32832
Telephone: (407) 481-8400
www.windoorinc.com

General Description:

System	Description	Label Rating	Design Pressure Rating (psf)
1	Series 4000 Aluminum Twin Single Hung Windows; Continuous Head and Sill	H-R80 107 x 72; Missile Level D	± 80
2	Series 4000 Aluminum Twin Single Hung Windows; Continuous Head and Sill	H-R120 107 x 72; Missile Level D	± 120
3	Series 4000 Aluminum Twin Single Hung Windows; Continuous Head and Sill	H-R120 107 x 72; Missile Level A	± 120

Component Dimensions:

System	Overall Window Size	Active Sash Size	Fixed Lite Daylight Opening Size
1	107” x 72”	Two: 51 ½ ” x 37 ¼ ”	Two: 48 ¼ ” x 30 ⅝ ”
2	107” x 72”	Two: 51 ½ ” x 37 ¼ ”	Two: 48 ¼ ” x 30 ⅝ ”
3	107” x 72”	Two: 51 ½ ” x 37 ¼ ”	Two: 48 ¼ ” x 30 ⅝ ”

Product Identification:
Two certification program labels (Keystone) will be affixed to the window. The certification program labels include the manufacturer's CAR number; product name; performance characteristics; and the approved inspection agency (Keystone). One label includes the following applicable standard: AAMA/WDMA/CSA 101/I.S.2/A440-05. The second label includes the following applicable standards: ASTM E 1886-05 and ASTM E 1996-05.

Each certification label contains a Certification Authorization Report (CAR) number located on the top right side of the label and a model name for the window. The following CAR numbers and model names are located on each label:

Label Identification:

			Certification Authorization Report (CAR) number
System	Model	Label with AAMA/WDMA/CSA 101/I.S.2/A440-05	Label with ASTM E 1886-05 / ASTM E 1996-05
1	4000 Twin Aluminum Impact Single Hung Comb Ass'y	167-702	167-290 Missile Level D
2	4000 Twin Aluminum Impact Single Hung Comb Ass'y	167-701	167-289 Missile Level D
3	4000 Twin Aluminum Impact Single Hung Comb Ass'y	167-703	167-291 Missile Level A

Impact Resistance:

System	Impact Resistant	Requirement
1, 2	Yes	These products satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the **Inland I** and **Seaward zone**. The assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded.
3	Yes	These products satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the **Inland I** and **Seaward zone**. The assemblies may only be installed at heights more than 30 feet above grade on the structure as long as the design pressure rating for the assemblies is not exceeded.

Installation:

Design Drawings: The windows shall be installed in accordance with Drawing No. 08-01435, titled "4000 Twin Aluminum Impact Single Hung Window Large and Small Missile Impact," sheets 1 through 6 of 6, dated January 4, 2012, signed and sealed by Luis R. Lomas., P.E on January 9, 2012. The stated drawings will be referred to as the approved drawings in this evaluation report.

Wall Framing Construction: The windows may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum compressive strength: 3,192 psi)
- Hollow concrete block; ASTM C-90, Grade N, Type 1 (or greater)
- Wood dimension lumber (minimum Spruce-Pine-Fir)
- Steel (18 gauge, 33 ksi)
- Aluminum (6063-T5 , minimum 0.125")

Installation:

- Refer to Sheet 1 of 6 of the approved drawings for the anchor layout and notes.

- Refer to Sheets 3 of 6 through and 6 of 6 of the approved drawings for installation details.

- The approved drawings indicate the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.